

## IX. HYDROLOGY AND WATER QUALITY

<i>Issues (and Supporting Information Sources):</i>		<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>IX.</b>	<b>HYDROLOGY AND WATER QUALITY— Would the project:</b>				
a)	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion of siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j)	Inundation of seiche, tsunamis, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## SUMMARY

*No potentially significant impacts to hydrology or water quality would result from the sale or development of the properties. If each lot is developed independently, construction activities not*

*subject to best management practices<sup>7</sup> as designed in a Storm Water Pollution Prevention Plan (SWPPP) could result in temporary, cumulatively water quality impacts to the local receiving water, Ballona Wetlands. No significant long-term impact to water quality is anticipated from the increased development. This impact will be considered in greater detail in an EIR.*

## IMPACTS ANALYSIS

### ***SALE AND DEVELOPMENT OF THE PLAYA DEL REY AND MARINA DEL REY LOTS***

Please see Appendix G for background information on Hydrology and Water Quality.

**a) Would the project violate any water quality standards or waste discharge requirements?**

Development of the lots would not violate water quality standards or waste discharge requirements. Each lot is covered under the Municipal Separate Storm Sewer (MS4s) National Pollutant Discharge Elimination System (NPDES) permit held by the County of Los Angeles, the purpose of which is to reduce the discharge of pollutants from MS4s to the maximum extent practicable. In addition, development of the lots could be subject to Phase II NPDES storm water regulations for construction activities, which apply when there is soil disturbance of one to five acres, or if less than one acre, is part of a larger common plan of development one acre or greater. Since the lots are each less than one acre, they would not be subject to the statewide General Construction Storm Water NPDES permit requirements if they were developed separately. However, multiple lots developed at the same time such that the soil disturbance would add up to more than one acre would be required to obtain a Storm Water Pollution Prevention Plan (SWPPP) for coverage under the statewide construction storm water permit. Complying with state requirements to obtain coverage under the statewide storm water permit would ensure that no impact to water quality standards or applicable waste discharge requirements would occur.

Since the PDR lots drain indirectly to Ballona Wetlands, development on each individual property may be subject to the Los Angeles Regional Water Quality Control Board (LARWQCB) Standard Urban Storm Water Mitigation Plan (SUSWMP) requirements due to the designated sensitive ecological status of the wetlands. However, finalization of the threshold requiring SUSWMP compliance has not been finalized yet. Implementation of a SUSWMP for each site would ensure that storm water runoff rates from each site would not be increased by development, and that urban runoff pollution would be minimized. This would require providing detention basins and potentially treatment systems to capture, reduce flow velocity, and treat the first ¾ inch of each storm according to the LARWQCB requirements. Compliance with the SUSWMP requirements, if applicable, would ensure that storm water runoff would not violate water quality standards or applicable waste discharge requirements.

<sup>7</sup> See <http://www.swrcb.ca.gov/>

- b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

Development of residences on each lot could slightly reduce percolation of storm water into the groundwater basin. However, the PDR lots likely do not contribute a significant source of percolation due to their location on the bluff, which rises approximately 150 feet above surrounding areas. Water that infiltrates through the pervious surfaces on the lots would not likely contribute to significant recharge of the regional aquifer, which is more than 150 feet below the bluff. Therefore, the infill development of these individual lots would not significantly interfere with groundwater recharge or affect groundwater supplies.

- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

Development of the lots could modify drainage patterns on each lot. However, no streams or rivers exist on the sites, so none would be altered. Development would not substantially increase future erosion potential, assuming that most residences would be landscaped post-development to avoid exposed soils that would be subject to erosion. The project would not result in substantial erosion or alter the course of a stream or river.

- d) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?**

The PDR and MDR lots are each within already established residential neighborhoods. Development of the lots would not alter a stream or river. The infill development would add a small amount of additional impervious surface to an already urbanized residential area. However, the total amount of storm water runoff in the street gutter drainage system would not substantially increase. Furthermore, the infill development would occur on existing lots that have a street drainage system adequate to accommodate the 50-year storm pursuant to the City Department of Public Works design standard for the residential neighborhood. Development would not significantly increase flood risk.

- e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Development on the PDR and MDR lots could increase impervious surfaces (driveways, sidewalks, etc) on each lot. This could slightly increase storm water runoff. The infill development would occur in neighborhoods that have a street drainage system designed to

accommodate the 50-year storm pursuant to the City or County Department of Public Works design standard. Prior to obtaining a building permit, developers would be required to prepare a drainage plan for each site attached with the building permit application. The City or County would approve each site's drainage plan prior to construction. No impact to the existing storm water drainage system would occur. Furthermore, development of the sites with residential uses would not be a source of substantial additional amounts of polluted runoff.

**f) Would the project otherwise substantially degrade water quality?**

Construction on the lots could produce pollutants that would have the potential to temporarily degrade the quality of receiving waters if not properly managed. The primary pollution of concern is sediment that results from excessive erosion of disturbed soils. Other potential pollutants include metals, pesticides, nutrients and soil additives, construction chemicals and fuel, and miscellaneous waste. No significant long-term impact to water quality is anticipated from construction activities.

Development would be required to comply with all applicable regulations to protect water quality. Construction on the lots could be subject to Phase II NPDES storm water regulations for construction activities, which apply when there is soil disturbance of one to five acres, or if less than one acre, is part of a larger common plan of development one acre or greater. Each individual site is less than one acre. Therefore, depending on when each site is developed, construction may or may not be subject to this regulation. If the sites are developed simultaneously and soil disturbance is greater than one acre, the developer would be required to prepare a SWPPP to minimize pollutants in runoff from the site. If the sites were developed individually, the regulations would not require a SWPPP to be prepared. Pollutants in runoff would not be considered a potentially significant impact to water quality due to the small size of the projects individually.

Once constructed, the development of the lots in either neighborhood would not substantially degrade water quality. Although landscaping could increase pesticide and fertilizer usage on the sites, the infill development would not substantially alter the existing residential nature of the two neighborhoods or the quality or character of the runoff. The contribution to urban runoff from each lot would be minimal. The PDR lots could be subject to SUSWMP requirements since storm water runoff from the area drains into the Ballona Wetlands, listed as an environmentally sensitive area. However, the requirements for environmentally sensitive areas have yet to be finalized by the LARWQCB. If required to comply with the SUSWMP, the developer would be required to implement source control BMPs as mitigation measures to reduce potential pollutants and/or storm water treatment systems to remove pollutants to ensure that development would not degrade water quality. No significant long-term impact to water quality is anticipated from the increased development.

- g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

The PDR lots are not located within a designated flood plain. Development in these lots would not place housing in a flood plain. The MDR lots are directly on the beach within the 100-year flood plain. Development on these two parcels would be subject to City requirements regarding development within a flood plain. The floor of any habitable space would need to be at least one foot above the base flood elevation. Design and construction of the structures would be subject to City approval. As such, the City-approved infill development in the existing neighborhoods located in a flood plain would not be considered a significant impact.

- h) Would the project place within a 100-year flood hazard area structures, which would impede or redirect flood flows?**

The PDR lots are not located within a designated flood plain. Development in these lots would not place housing in a flood plain. The MDR lots are directly on the beach within the 100-year flood plain. Development on these two parcels would alter the flood plain slightly, requiring a letter of flood plain revision to be submitted to the Federal Emergency Management Agency. The development would need to be designed to avoid modifying the flood plain in a way that would impact neighboring structures. Designs would require City approval to ensure that flood flows would not adversely affect neighboring structures. As such, the City-approved infill development in the existing neighborhoods located in a flood plain would not be considered a significant impact.

- i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

The PDR lots are not located within a designated inundation area as noted in the City of Los Angeles' General Plan Framework. The MDR lots are directly on the beach within the 100-year flood plain and potential inundation area. Development within inundation areas requires City approval. The risk of dam failure and inundation is minimal. The City-approved infill development in the existing neighborhoods is located in a potential inundation area that would not be considered to have a significant impact.

- j) Would the project expose people or structures to a significant risk of loss, injury or death involving inundation of seiche, tsunami, or mudflow?**

The PDR lots are not located within a tsunami or risk area. Some sites are located near steep inclines and cliff faces that could produce mudflows. The MDR lots are each located within the City-designated tsunami risk zone. Given the standard conditions set forth in the City of Los Angeles Flood Hazard Specific Plan providing development requirements, and the rare occurrence of such an event, the impact is considered less than significant.